

## ABSTRACT OF THE DISCLOSURE

When recording is performed on a perpendicular medium by using a single pole type head, there emerges a problem that the shape of magnetic transition is curved with respect to the track width direction due to the distribution of head write field. If the shape of magnetic transition is curved, there occur problems as follows: when reading is performed by a magnetoresistive head, the magnetic transition length appears to be large, so that the half-width of an isolated pulse is increased, and at the same time, the recording track width seems to be reduced with an increase in linear recording density. In the side on the trailing side of a main pole air bearing surface of a magnetic head for perpendicular recording, the central portion is situated closer to the leading side than the corners on the trailing side. In other words, the main pole air bearing surface is formed in the shape of a recess with respect to the trailing side. It is possible to linearize the magnetic field distribution on the trailing side whereby the magnetic reversal is determined. As a result, it is possible to record a bit without curving the shape of magnetic reversal. Accordingly, it is possible to provide a magnetic head for perpendicular recording, which will not entail the following problems: when the bit is read, the magnetic reversal width appears to be large, so that the half-width of a solitary wave is increased,

and at the same time, the recording track width is narrowed with an increase in linear recording density.